

REMARKS

The Examiner rejected claims 13-19, 21, 24-25, 27-31, and 35-41 under 35 U.S.C. 103 as being unpatentable over Sezginer et al (U. S. 5,705,927). This rejection is respectfully traversed.

Sezginer discloses a pulsed NMR device that includes two permanent magnets and a third shimming magnet. The two permanent magnets generate what is known in the art as a "saddle point" resonance region in which the contour lines generated by the static magnetic field are not substantially straight in the axial direction at the depth of investigation. The shimming magnet suppresses magnetic resonance in the borehole fluid. The shimming magnet also reduces the gradient in the region of investigation .

One difference between Sezginer and the claims at issue is that in the subject invention, the axially magnetized magnets generate a static magnetic field where the contour lines are substantially straight in the axial direction at the depth of investigation. As stated above, Sezginer describes two permanent magnets that generate a static magnetic field in which the contour lines are not substantially straight in the axial direction at the depth of investigation. This element of the claims is neither taught nor suggested by Sezginer.

Another difference noted by the Examiner is the absence of a magnetically permeable member for shaping the static magnetic field. Assuming *arguendo* that the shimming magnet of Sezginer could be made of a magnetically permeable material, the shimming magnet still would not shape the static magnetic field nor would the shimming magnets produce contour lines that are substantially straight in the axial direction at the depth of investigation. This element of the claims is neither taught nor suggested by Sezginer.

In the view of the foregoing, it is respectfully submitted that the specification and claims of this application are in condition for formal allowance. Such allowance, together with subsequent issue of Letters Patent is respectfully solicited.

The Assistant Commissioner for Patents is requested to grant a petition for the extension of time which is required to make this response timely and is hereby authorized to charge any fee for such petition and extension of time or credit any overpayment for such petition and extension of time to deposit Account No.19-0610.

Respectfully submitted,

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